SCENA LED 150

User's Manual rel. 1.2 **GB**

D.T.S. Illuminazione s.r.l. – ITALY
http://www.dts-lighting.it/

DTS
The Lighting Company

Made in Italy

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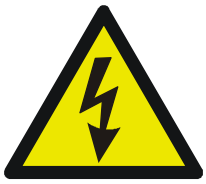
1- SYMBOLS

Graphic symbols used on this manual

THIS SYMBOL INDICATES A HOT SURFACE



THIS SYMBOL INDICATES ELECTRIC SHOCK RISK

THIS SYMBOL INDICATES GENERAL RISK

THIS SYMBOL MEANS “DO NOT PLACE THE UNIT ON INFLAMMABLE SURFACES”

THIS SYMBOL INDICATES THE MINIMUM DISTANCE TO BE KEPT BETWEEN THE DEVICE AND THE LIT OBJECT

2- GENERAL WARNING

Read the instruction contained in this user manual carefully, as they give important information regarding safety during installation , use and maintenance.
The device is not for domestic use and must be installed by a qualified electrician or experienced person.
Always disconnect the device from the mains before maintenance.
The device must always be equipped with an efficient ground connection.

3- GENERAL WARRANTY CONDITIONS

The unit is guaranteed for 36 months from the date of purchase against manufacturing material defects.

4- TECHNICAL FEATURES

OVERVIEW

SCENA LED 150 is a compact, lightweight, DMX-controlled theatre projector featuring a single high-power White LED (3.000 ºK), a Ø 120 m m PC or Fresnel lens, and a long wide excursion 8,2° - 70° (PC Version) or 12,8 ° - 62° (Fresnel Version) linear motorized zoom with high-efficiency optical system, enabling it to be used as a PC Beam or a very wide Wash.The unit is wireless ready.
SCENA LED 150 is a modern alternative to conventional theatre lights, improving light quality, flexibility of use and installation, energy savings and component duration.
In fact the fixture doesn't heat up, and the projection is always flicker free.
Also, the dimming curves are similar to those of halogen lamps.
The connectors are Powercon In & Out and 5 poles DMX In & Out.
SCENA LED 150 is contained in a strong housing with folded edges, designed to resist all the rigours of continuous use.
Also, the yoke has an exclusive round flange + clutch system which guarantees a perfect grip and safer operation.

PRODUCT CODES:

03.TS016.A	SCENA LED 150 *White 3.000 ºK *PC BLACK
03.TS016.F	SCENA LED 150 *White 3.000 ºK *FR BLACK
03.TS016.AWS	SCENA LED 150 *White 3.000 ºK *With Wi reless on Board *PC BLACK
03.TS016.FWS	SCENA LED 150 *White 3.000 ºK *With Wi reless on Board *FR BLACK
03.TS017.A	SCENA LED 150 *White 4.000 ºK *PC B LACK
03.TS017.F	SCENA LED 150 *White 4.000 ºK *FR BLACK
03.TS017.AWS	SCENA LED 150 *White 4.000 ºK *Wi th Wireless on Board *PC BLACK
03.TS017.FWS	SCENA LED 150 *White 4.000 ºK *W ith Wireless on Board *FR BLACK
03.TS018.A	SCENA LED 150 *White 5.600 ºK *PC B LACK
03.TS018.F	SCENA LED 150 *White 5.600 ºK *FR BLACK
03.TS018.AWS	SCENA LED 150 *White 5.600 ºK *Wi th Wireless on Board *PC BLACK
03.TS018.FWS	SCENA LED 150 *White 5.600 ºK *W ith Wireless on Board *FR BLACK

LED Technology
1 x White LED 3.000 ℃, CRI>90, 7.000 Lumens
Also available as 4.000 ℃ and 5.600 ℃ LEDs
LED Max power: 150W

Optical group
Linear motorized zoom:
PC Version (Ø 120 mm PC lens) from min 8,2°(1.600 Lux at 5 mt)
to max 70°(185 Lux at 5 mt)
Fresnel Version (Ø 120 mm Fresnel lens) from min 12,8°(800 Lux at 5 mt)
to max 62°(250 Lux at 5 mt)

Control
4 DMX channels
LED display + 4 soft keys
Wireless ready

Connectors
Power supply: POWERCON IN & OUT Connector
DMX: 5 poles In & Out Connector

Power supply
Electronic full-range AC 90-260 V 50 / 60 Hz

5- MAIN ELECTRICAL CHARACTERISTICS

Input Voltage Range : Vin 90 - 260 Vac
Frequency : 50 / 60 Hz
Power Consumption Range : 5 - 160 W
Power Factor (Pf) : 0.95 electronic PFC controller
Efficiency : 95% typical

Control Input:
Control Signal : DMX 512
Dimming System : Constant Current PWM
Address Range : DMX 512 channels addressable by display

6- ACCESSORIES

As standard

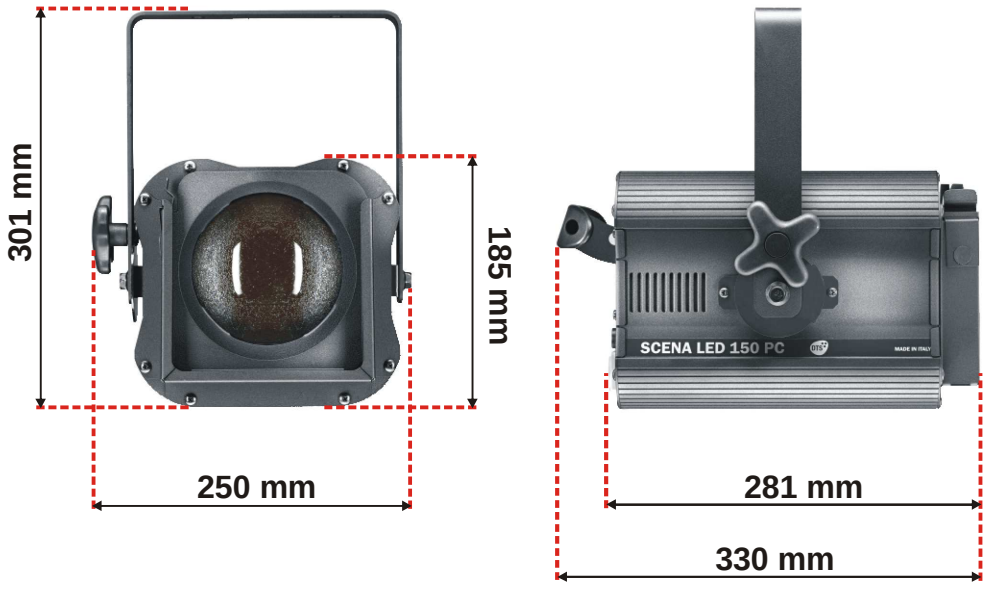
1 x User's Manual
1 x POWERCON male cable connector (D.T.S. Code: 0520P014)
1 x XLR 5 pins male cable connector (D.T.S. Code: 0508B028)
1 x XLR 5 pins female cable connector (D.T.S. Code: 0508B027)
1 x Filterframe for SCENA LED 150 *Black finish (D.T.S. Code: 02M00416.46)

Optional (on request)

* "C" Clamp G60 (Max. Load. 50 Kg) *Black finish (D.T.S. Code: 0521A004)
* "C" Clamp G60 (Max. Load. 50 Kg) *Chrome finish (D.T.S. Code: 0521A004.20)
* Barndoor for SCENA LED 150 *Black finish (D.T.S. Code: 03.TBD01)
* Ø 120 mm PC lens for SCENA LED 150 (D.T.S. Code: 0506P003)
* Ø 120 mm Fresnel lens for SCENA LED 150 (D.T.S. Code: 0506P004)
* Filterframe for SCENA LED 150 *Black finish (D.T.S. Code: 02M00416.46)

DIMENSIONS

Unit Dimensions (LxWxH)	Packing Dimensions (LxWxH)
330 x 250 x 301 mm	300 x 235 x 425 mm
Weight	**Weight**
5,3 Kg (PC version)	6,3 Kg (PC version)
5,1 Kg (Fresnel version)	6,1 Kg (Fresnel version)



7- IMPORTANT SAFETY INFORMATION

7.1 Fire prevention:

Never locate the fixture on any flammable surface.
Minimum distance from flammable materials: 10 cm.
Minimum distance from the closest illuminable surface: 30 cm. 30cm
Replace any blown or damaged fuses only with those of identical value (3,15 AT).

7.2 Prevention from electric shock:

High voltage is present inside the unit.
Unplug the unit prior to performing any operation which involves touching the inside of the unit.
This equipment must be grounded, do not connect to non-grounded supplies.
The use of a thermal magnetic circuit breaker is recommended for each SCENA LED 150 unit.
Use only AC supplies 90-260V, 50 / 60 Hz.
SCENA LED 150 should never be located in position exposed to rain or in areas of extreme humidity.
A good air ventilation is essential for proper equipment work.

7.3 Safety:

The external surface of the unit may exeed 50°C; ne ver handle the unit until at least 5 minutes have elapsed since the unit was turned off.
Never install the unit in an enclosed area lacking sufficient air flow.
The ambient temperature should not exeed 40°C and s hould not be lower than -10°C.

8- INPUT / OUTPUT CONNECTIONS

DISPLAY PANEL

FUSE 3,15 AT

MAINS AC OUTPUT
90-260V 50/60 Hz
(MAX 14 SCENA LED 150 UNITS @ 230V ;
MAX 7 SCENA LED 150 UNITS @ 120V)

MAINS AC INPUT
90-260V 50/60 Hz

DMX IN
XLR 5 Pins Female
Panel Connector

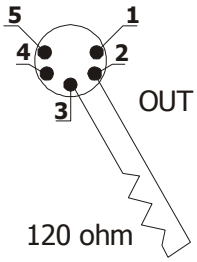
DMX OUT
XLR 5 Pins Male
Panel Connector

9- DMX SIGNAL CONNECTION:

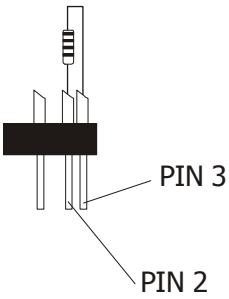
The unit operates using a digital DMX 512 signal.
Connection between the controller and the unit or between units must be carried out using a two pair screened ø 0.5 mm.
Ensure that the conductors do not touch each other.
Do not connect the cable ground to the DMX connector chassis.
The plug housing must be isolated. Connect the mixer signal to the DMX IN projector plug and connect it to the next projector by connecting the DMX OUT plug on the first unit to the DMX IN plug of the second one.
In this way, all the projectors are cascade connected.

If the display showing the DMX address flashes, then one of the following errors has occurred:
- DMX signal not present
- DMX reception problem

For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.
The DMX terminator is a male XLR 3-5 pins connector with a 120 ohm resistor Between pin 2 and 3.
The DMX terminator must be plugged into the last unit (DMX out panel connector) of the DMX line.



PLACE A 120 OHM RESISTOR BETWEEN PIN 2 AND 3 OF A MALE XRL CONNECTOR AND PLUG IT INTO THE DMX OUT PANEL CONNECTOR OF THE LAST UNIT CONNECTED TO THE DMX LINE



9.1 DMX addresses

SCENA LED 150 can be controlled with 4 DMX channels.
In order to use the unit in 4 channels, set the following addresses on the mixer:

Projector 1	A001	
Projector 2	A005	If you want to select the next projector, just add “4”
Projector 3	A009	
…..	A….	
projector 6	A021	

9.2 Selecting the DMX address

1) Press the UP-DOWN key until you reach the required DMX address. The numbers on the display will start to flash (but the new DMX address hasn't yet been set).
2) Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now controlled by the new DMX address.

TIPS: if you keep pushed the UP or DOWN keys, the channels are calculated more quickly and you get a faster selection.
2) Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now controlled by the new DMX address.

10- FIRMWARE UPDATING

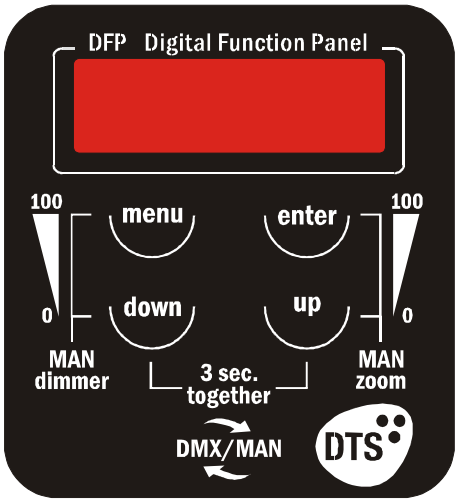
Warning:
This procedure require a base knowledge of Windows computer applications.
Please refer to an authorised D.T.S. service centre.

To update the software version of the SCENA LED 150 you need:
D.T.S. RED BOX interface (D.T.S. Code: 03.LA.008).
USB-DMX Driver for the D.T.S. RED BOX interface.
D.T.S. Firmware upgrade utility program.
(The driver and the installation procedure are available in our web site www.dts-lighting.it)

Updating the software version.
Please follow the procedure below to perform the update:

1. Install the D.T.S. RED BOX USB-DMX driver on the PC you will use to update the unit software.
2. Connect the D.T.S. RED BOX interface to the PC by using a USB cable.
3. Connect the D.T.S. RED BOX interface to the fixture by using a DMX cable.
4. Download the new software version into the unit by using D.T.S. Firmware upgrade utility program.

11- DISPLAY FUNCTIONS



DISPLAY FUNCTIONS

The SCENA LED 150 display panel shows all the available functions . Using these functions, it is possible to change some of the parameters and add some functions. Changing the D.T.S. setting can vary the functions of the unit so that it does not respond to the DMX 512 used to control it. Carefully follow the instructions below before carrying out any variations or selections.
NOTE: the symbol ☞ shows which key has to be pushed to obtain the desired function.

Software version 1.22

A001 ☞MENU ☞Up-Down d ISP ☞ENTER ☞Up-Down PoS1 ☞ENTER ☞Up-Down

- AA — Floor Position ☞ENTER
- bb — Suspended Position ☞ENTER

☞Up-Down StbY ☞ENTER ☞Up-Down

- oFF — Display Off ☞ENTER
- on — Display Always on ☞ENTER

REVERSE DISPLAY
Reverses display's reading depending on the mounting position (on the ground or suspended).

DISPLAY STAND BY
To turn off the display (after 5 seconds) Or leave it always on.

☞MENU ☞Up-Down nOdE ☞ENTER ☞Up-Down

- 4cH ☞ENTER — Default DMX Mode 4 Channels
- 2cH ☞ENTER — 2 DMX channels mode
- 1cH ☞ENTER — 1 DMX channel mode

☞Up-Down nAn ☞ENTER SUrE ☞ENTER — Manual Mode

DMX MODE
To select DMX mode : 4 DMX channels mode (default), 2 DMX channels mode, 1 DMX channel mode or Manual mode. Manual mode can also be activated by pressing at the same time the "UP'' + "DOWN" buttons on unit display for 3 seconds ("A001").

LED
Led Min/Max, Smooth, Compression, Sync and Boost level values settings

LED MINIMUM VALUE
This menu allow to select the minimum levels for white

LED MAXIMUM VALUE
This menu allow to select the maximum levels for white

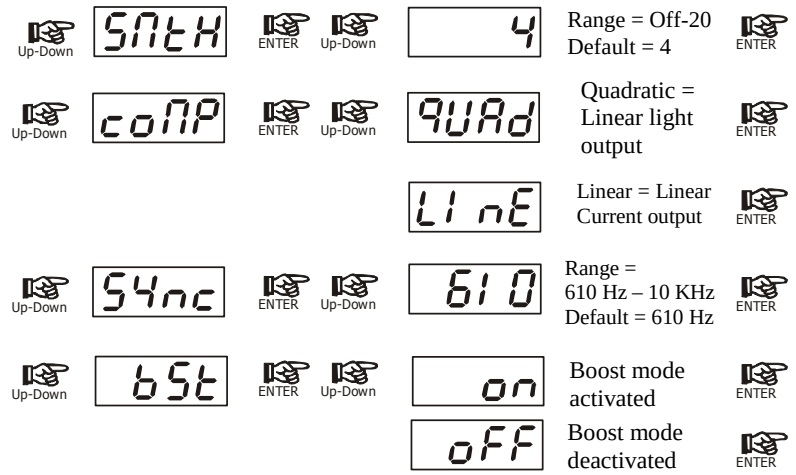
These settings have priority on Master Dimmer channel

SMOOTH VALUE
This menu allow to select the value of the delay (in milliseconds) for Dimmer channel reaction to DMX or Program variation.
Off = 25 ms. Instant response to DMX variation.
20 = 250 ms. Smooth response to DMX variation.

COMPRESSION
This menu allow to select between Linear current output or Quadratic current output for LEDs
Default = Quadratic

SYNC
This menu allow to adjust the PWM frequency value (Hz) in order to reduce flickering in the process of your camera recordings

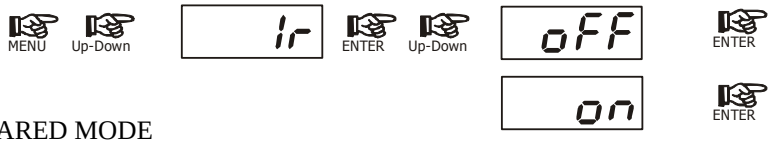
BOOST DRIVING
This menu allow to increase the LED's current from Min to Max



With BOOST active, the LED'S current is set to Max value. (30% more gain compared to BOOST Off)
Default = Enabled

DIMMER
Dimmer intensity level (range 0-255)
Active only if MODE = 1 DMX channel mode

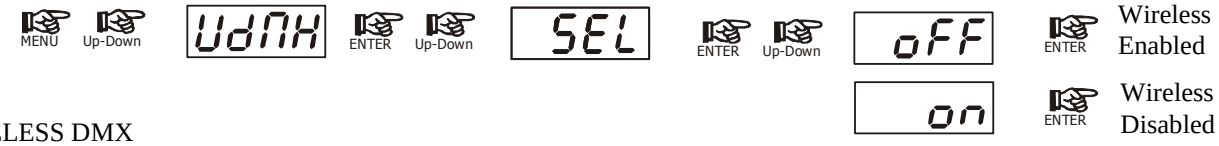
ZOOM
Zoom regulation (range 0-255)
Active only if MODE = 1 DMX channel mode



Note:
External infrared remote sensor needed (D.T.S. Code: 03.LA.016)

INFRARED MODE
Infrared remote control.
By activating Ir Mode, it will be possible to navigate trought the unit functions by using the D.T.S. infrared remote control
(D.T.S. Code: 0514L008)

NOT IMPLEMENTED ON SCENA LED 150



WIRELESS DMX

Wireless DMX enabled / disabled.
By activating WDMX MODE, it will be possible to control SCENA LED 150 via D.T.S. ANTENNA Wireless DMX Transmitter (cod. 03.E1271).
<u>Active only on SCENA LED 150 with Wireless on board</u>

UNLINK = LOG OUT

Logging on SCENA LED 150 (WIRELESS DMX must be enabled on SCENA LED 150 unit)

To log on the SCENA LED 150 in the WIRELESS system simply press and quickly release the function button on the transmitter.
The transmitter will start flashing rapidly red/green scanning for new free receivers / SCENA LED 150 units.
When a SCENA LED 150 logs on to the transmitter the LINK green light on transmitter starts to flash rapidly.
After approximately 10 seconds the transmitter will jump back to normal mode and continue transmitting data.
The SCENA LED 150 now try to synchronize to the transmitter.
When synchronized to the transmitter, 2 different modes are possible:
1. Antenna transmitter has detected and transmits a DMX signal, in this mode a solid green light is seen on the transmitter and solid display is seen on SCENA LED 150.
2. No DMX signal connected, the Antenna transmitter will flash red/green; display blinking on SCENA LED 150.

To log SCENA LED 150 off from a transmitter simply select UNLINK function „UnLH" under WIRELESS DMX MENU „UdNH" and press ENTER.
When SCENA LED 150 is logged off, the display is blinking, meaning its available for log in on a new transmitter.

Logging out a SCENA LED 150

Select UNLINK function „UnLH" under WIRELESS DMX MENU „UdNH" and press ENTER.
When SCENA LED 150 is logged off the display is blinking, meaning its available for log in on a new transmitter.

Logging out all SCENA LED 150units linked to a transmitter

Press and hold the function button of the transmitter for about 3 seconds**.** When the display is blinking on SCENA LED 150, it mean that the units are logged out.

Transmitter, Status LED
Flashing red/green, no dmx connected.
Solid green, dmx signal detected and transmitted.
Fast flashing red/green, log in mode (every free SCENA LED 150 unit, not logged in to any other transmitter, will be logged on)

SCENA LED 150 Status
Display blinking = not logged on to a transmitter (free).
Solid display = logged on to a transmitter and receiving dmx data.

EMERGENCY
Emergency operating mode.
By setting Emergency mode, it will be possible to select Dimmer intensity level that will then ran if DMX signal is missing or not available.
Usefull for Emergency EXIT

Default = 255

DEFAULT SETTING
To restore default settings

Internal unit temperature (° Celsius)

TEMPERATURE
Internal unit temperature visualisation

LIFE TIME
This menu show the total unit life time and the LED life time

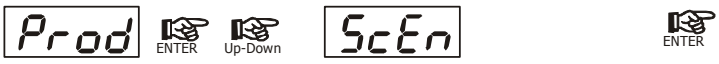
SOFTWARE
Software version

12- SERVICE MENU

For technical personnel only

To operate this menu:
-Connect the unit to the main
-While reset is running, press the MENU and ENTER keys at the same time.

LENS
PC or Fresnel
lens selection



PRODUCT
Product model selection
SCENA LED 150 (Default)
or PROFILO LED 150

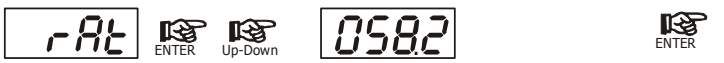
CURRENT
From min 20 mA to max 600 mA
Default = 300 mA

ZERO OFFSET
From min 1 mm to max 50 mm
Default = 5 mm

RANGE
From min 30 mm to max 150 mm
Default = 103 mm

SPEED
Maximum speed
From min 1 mm/s to max 400 mm/s
Default = 20 mm/s

ACCELERATION
Maximum Acceleration/Deceleration
From min 1 mm/s² to max 400 mm/s²
Default = 10 mm/s²



RATIO
Transmission ratio.
From min 10 mm/turn to max 200 mm/turn
Default = 58.2 mm/turn

RESM
To restore service and
user default settings

EXIT
Exit from service menu

13- DMX PROTOCOL

4 CHANNELS MODE (Default)

1 SHUTTER / STROBE
2 DIMMER
3 ZOOM
4 RESET

DMX CHANNEL	1	Parameter: **SHUTTER / STROBE**

DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-009					**Black-out**
010-019					**Open**
020-029					**Black-out**
030-119					**Strobe (from 3.27 s to 30 ms)**
120-149					**Pulse up (from 42.6 s to 120 ms)**
150-179					**Pulse down (from 42.6 s to 120 ms)**
180-204					**Random strobe (Dimmer channel active)**
205-229					**Full independent Random Strobe (Dimmer channel disabled)**
230-255					**Open**

DMX CHANNEL	2	Parameter: **DIMMER**

DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					**Proportional dimmer**

DMX CHANNEL	3	Parameter: **ZOOM**

DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					**Linear ZOOM from Narrow to Wide (8,2°- 70°PC lens ; 12,8°- 62°FRESNEL lens)**

DMX CHANNEL	4	Parameter: **RESET**

DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-015					**No Effect**
016-255					**Zoom Motor Reset (active after 3 sec.)**

2 CHANNELS MODE

1 DIMMER
2 ZOOM

DMX CHANNEL	1	Parameter: **DIMMER**

DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					**Proportional dimmer**

DMX CHANNEL	2	Parameter: **ZOOM**

DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					**Linear ZOOM from Narrow to Wide (8,2°- 70°PC lens ; 12,8°- 62°FRESNEL lens)**

1 CHANNEL MODE

1 DIMMER

DMX CHANNEL	1	Parameter: **DIMMER**

DMX range Value	Mid Point DMX value	Move Range (degrees)	Mode	Option	Function
000-255					**Proportional dimmer**

NOTES

NOTES

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